

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 February 2005 (10.02.2005)

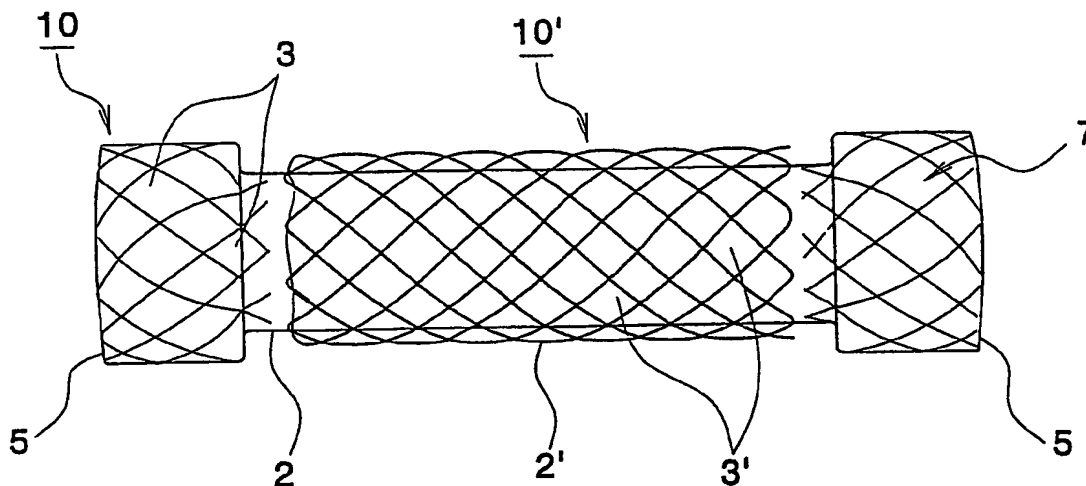
PCT

(10) International Publication Number
WO 2005/011533 A1

- (51) International Patent Classification⁷: **A61F 2/20** (74) Agent: **CHUNG, Byung Ho**; 3F, Jeonwon Bldg., 669-6, Yeoksam-dong, Kangnam-gu, Seoul 135-915 (KR).
- (21) International Application Number: **PCT/KR2003/001513** (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: **29 July 2003 (29.07.2003)**
- (25) Filing Language: **Korean**
- (26) Publication Language: **English**
- (71) Applicant (*for all designated States except US*): **TAE-WOONG MEDICAL CO.,LTD [KR/KR]**; 610, Ilsan Techno-Town, 1141-1, Baksuk-dong, Ilsan-gu, Koyang-si, Kyunggi-do 411-360 (KR).
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicants and
(72) Inventors: **SHIN, Kyong Min [KR/KR]**; 103-302, Gumsong Hills Vill, 458, Hongeun-dong, Seodaemun-gu, Seoul 120-100 (KR). **KIM, Jin-Hong [KR/KR]**; 103-1601 SK Apt., 700 Seochon-ri, Gihung-up, Yongin-si, Kyunggi-do 449-959 (KR).
- Published:**
— *with international search report*

[Continued on next page]

(54) Title: **SELF-EXPANDABLE STENT**



(57) Abstract: The object of this invention is to provide a self-expandable stent, made of a shape-memory alloy and used for insertion in a narrow or blocked target portion of the contracted gullet having a lesion so as to open the target portion. The stent includes a coated primary unit (10) having a hollow cylindrical body (2) fabricated by knitting a shape-memory alloy wire to make a net structure, with both an enlarged diameter part (5) and a coat layer (7). An uncoated secondary unit (10') surrounds the hollow cylindrical body (2) of the coated primary unit (10). The secondary unit (10') has a hollow cylindrical body (2') fabricated by knitting a superelastic shape-memory alloy wire to make a net structure having diamond-shaped meshes (3'). The stent is prevented from being undesirably removed from a narrow or blocked target portion of the gullet having a lesion.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.